

Patent Claims

1. A weighting circuit for a receiver (1) which is provided for receiving a multicarrier signal comprising carrier signals,
  - 5 where the weighting circuit (18) weights the carrier signals such that the spurious signal energy is of equal magnitude for all weighted carrier signals.
2. The weighting circuit as claimed in claim 1,
  - characterized
- 10 in that the weighting circuit (18) has at least one multiplier (7-i) which multiplies an associated carrier signal by a stored weighting coefficient ( $g_i$ ).
3. The weighting circuit as claimed in claim 2,
  - characterized
- 15 in that the weighting circuit (18) has a memory which stores a plurality of weighting coefficient sets ( $G_i$ ) which each comprise a plurality of weighting coefficients ( $g_i$ ).
4. The weighting circuit as claimed in claim 3,
  - 20 characterized
- in that the memory (9) can be programmed via an interface.
5. The weighting circuit as claimed in claim 3,
  - characterized
- 25 in that the weighting circuit (18) has a selector (15) which selects one of the weighting coefficient sets ( $G_i$ ) stored in the memory.
6. The weighting circuit as claimed in claim 5,
  - characterized
- 30 in that the selector (15) selects a weighting coefficient set ( $G_i$ ) on the basis of an expected spurious signal energy.
7. The weighting circuit as claimed in claim 6,
  - characterized
- 35 in that the selector (15) selects a weighting coefficient set ( $G_i$ ) on the basis of an averaged frequency offset between the maximum of the spurious signal spectrum and the next closest carrier signal of the multicarrier signal.

8. The weighting circuit as claimed in claim 7,  
characterized  
in that the multicarrier signal is broken down into the carrier signals by a  
5 computation circuit (5).
9. The weighting circuit as claimed in claim 8,  
characterized  
in that the computation circuit (5) is a Fast Fourier Transformation circuit.  
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10. The weighting circuit as claimed in claim 9,  
characterized  
in that the carrier signals broken down by the computation circuit (5) are  
buffer-stored in a buffer store (24).  
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11. The weighting circuit as claimed in claim 6,  
characterized  
in that the expected spurious signal energy can be set externally.  
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12. The weighting circuit as claimed in claim 6,  
characterized  
in that the expected spurious signal energy is calculated by an estimation  
unit (25) on the basis of the received multicarrier signal.